What is claimed is:

1. A process of forming opto-via holes, comprising:

forming a plurality of via holes on a plurality of copper clad laminates using a drill;

plating an inner wall of each via hole;

exposing and etching plated portions of an upper and lower side of each copper clad laminate to form a circuit pattern on the upper and lower side of the copper clad laminate;

layering the patterned copper clad laminates on each other using an insulating resin adhesive; and

removing the insulating resin adhesive from the predetermined via holes to form opto-via holes.

2. The process as set forth in claim 1, wherein the opto-via holes comprise electric-via holes and opto-via holes.

3. The process as set forth in claim 1, wherein the opto-via holes are formed by a CO_2 laser beam or a mechanical bit in the removing step.

4. The process as set forth in claim 1, wherein an epoxy resin with 95 % or more light transmissivity is filled

in the opto-via holes.

5. A process of forming opto-via holes for optical waveguides, comprising:

forming circuit patterns on a plurality of copper clad laminates, respectively, each of said copper clad laminates including an insulating layer and copper-clad layers coated on an upper and a lower side of the insulating layer;

firstly layering the patterned copper clad laminates on each other using an adhesive;

firstly drilling a plurality of electric- and first opto-via holes on desired positions of each of the patterned copper clad laminates;

plating inner walls of the firstly drilled electric- and opto-via holes;

exposing and etching plated portions of an upper and a lower side of each of the copper clad laminates to form a circuit pattern on the upper and lower side of each of the copper clad laminates; and

secondly drilling a plurality of second opto-via holes on each of the copper clad laminates.

6. The process as set forth in claim 5, further comprising forming a stepped part in the vicinity of each of the first and second opto-via holes and attaching an optical

waveguide to the stepped part.

7. The process as set forth in claim 5, wherein an epoxy resin with 95 % or more light transmissivity is filled in the first and second opto-via holes.

8. A printed circuit board with opto-via holes for optical waveguides, comprising:

a plurality of copper clad laminates with a plurality of via holes formed by a drill;

a plated layer formed on an inner wall of each of the via holes;

a circuit pattern layer formed by exposing and etching plated portions on an upper and a lower side of each of the copper clad laminates;

an insulating resin adhesive used to layer the patterned copper clad laminates on each other;

a plurality of opto-via holes formed by removing the insulating resin adhesive from the via holes; and

an optical waveguide positioned such that an optical signal through each of the opto-via holes can be obtained.

9. The printed circuit board as set forth in claim 8, wherein the opto-via holes comprise electric-via holes and opto-via holes.

10. The printed circuit board as set forth in claim 8, wherein the opto-via holes are formed by a CO_2 laser beam or a mechanical bit.

11. The printed circuit board as set forth in claim 8, wherein an epoxy resin with 95 % or more light transmissivity is filled in the opto-via holes.

12. A printed circuit board with opto-via holes for optical waveguides, comprising:

a plurality of copper clad laminates with an insulating layer and copper layers coated on an upper and a lower side of the insulating layer, each of said copper clad laminates including a circuit pattern formed thereon;

an adhesive used to firstly layer the patterned copper clad laminates on each other;

a plurality of electric-via holes formed by firstly drilling desired points on each of the copper clad laminates;

a plurality of first opto-via holes formed at the same time as the drilling of the electric-via holes;

a plated layer formed on an inner wall of each of the electric-via holes and the first opto-via holes;

a circuit pattern layer formed by exposing and etching

the plated portions on an upper and a lower side of each of the copper clad laminates;

a plurality of second opto-via holes formed by secondly drilling desired points on each of the copper clad laminates; and

an optical waveguide positioned such that an optical signal can be obtained through each of the first and second opto-via holes.

13. The printed circuit board as set forth in claim 12, wherein an epoxy resin with 95 % or more light transmissivity is filled in the second opto-via holes.